United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

22434

7590

07/21/2006

BEYER WEAVER & THOMAS, LLP P.O. BOX 70250 OAKLAND, CA 94612-0250

	EXAM	INER
L	EE, Ch	IEUNG
ART UNIT		PAPER NUMBER
2812		· · · · · · · · · · · · · · · · · · ·

DATE MAILED: 07/21/2006

1	APPLICATION NO.	PLICATION NO. FILING DATE FIRST NAMED INVE		ATTORNEY DOCKET NO.	CONFIRMATION NO.
•	10/649.351	08/26/2003	Sang-Hyeob Lee N	OVLP033X1/NVLS-000498X	K1 4174

TITLE OF INVENTION: METHOD FOR REDUCING TUNGSTEN FILM ROUGHNESS AND IMPROVING STEP COVERAGE

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$0	\$1700	10/23/2006

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above
- B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

PREV. PAID ISSUE FEE

Alexandria, Virginia 22313-1450 or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the

22434

APPLN, TYPE

Authorized Signature

Typed or printed name

7590

07/21/2006

BEYER WEAVER & THOMAS, LLP P.O. BOX 70250 OAKLAND, CA 94612-0250

SMALL ENTITY

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)	
(Signature)	
(Date)	

TOTAL FEE(S) DUE

DATE DUE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,351	08/26/2003	Sang-Hyeob Lee N	OVLP033X1/NVLS-0004983	X1 4174

PUBLICATION FEE DUE

TITLE OF INVENTION: METHOD FOR REDUCING TUNGSTEN FILM ROUGHNESS AND IMPROVING STEP COVERAGE

ISSUE FEE DUE

nonprovisional	NO	\$1400	\$300	\$0	\$1700	10/23/2006
EXAMINE	₹	ART UNIT	CLASS-SUBCLASS			
LEE, CHEU	NG	2812	438-627000			
1. Change of correspondence CFR 1.363). Change of corresponde Address form PTO/SB/12 "Fee Address" indicati PTO/SB/47; Rev 03-02 o Number is required.	ence address (or Cha 2) attached. on (or "Fee Address r more recent) attach	inge of Correspondence " Indication form ned. Use of a Customer	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.			
3. ASSIGNEE NAME AND PLEASE NOTE: Unless recordation as set forth in (A) NAME OF ASSIGNE	an assignee is ident 37 CFR 3.11. Com E	ified below, no assignee pletion of this form is NO	data will appear on the part a substitute for filing and (B) RESIDENCE: (CITY	tent. If an assignee is idensisgnment. and STATE OR COUNTR Individual	Y)	
4a. The following fee(s) are s Issue Fee Publication Fee (No sr Advance Order - # of	nall entity discount	permitted)	☐ A check is enclosed. ☐ Payment by credit care ☐ The Director is hereby	se first reapply any previous. J. Form PTO-2038 is attach authorized to charge the reast Account Number	ned. quired fee(s), any defi	·
5. Change in Entity Status (a. Applicant claims SN NOTE: The Issue Fee and Pt interest as shown by the reco	AALL ENTITY state	us. See 37 CFR 1.27.		ger claiming SMALL ENTI ne applicant; a registered att		

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Date

Registration No.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/649,351 08/26/2003		Sang-Hyeob Lee	NOVLP033X1/NVLS-000498X1 4174		
22434 7590 07/21/2006			EXAM	IINER	
BEYER WEAV	/ER & THOMAS, LL	P	LEE, C	HEUNG	
P.O. BOX 70250			ART UNIT	PAPER NUMBER	
OAKLAND, CA	94612-0250		2812		
			DATE MAILED: 07/21/200)6	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.